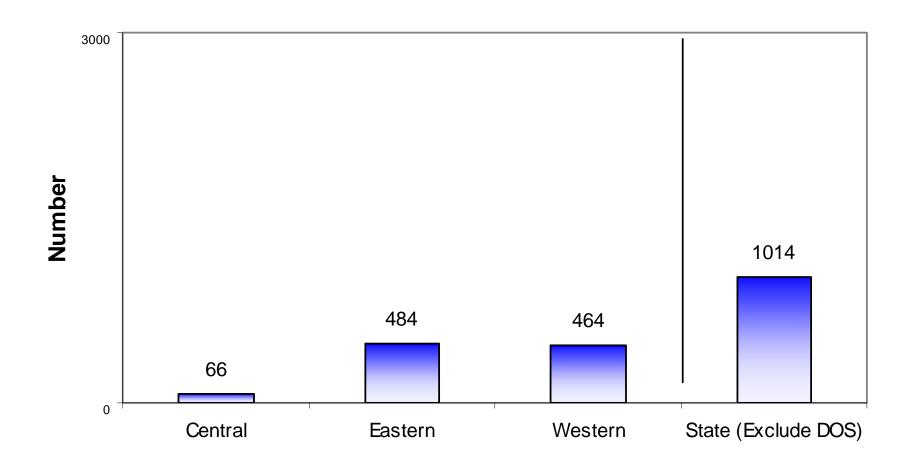
State Trauma Care Committee Report

January 1 – June 30, 2007







Central Region #'s by Hospital

White Sulphur Springs - Mountainview Med. Ctr.MAF	3
Havre - Northern Montana Hospital	7
Choteau - Teton Medical Center MAF	6
Conrad - Pondera Medical Center- <u>NEW</u>	9
Chester - Liberty County Hospital	1
Helena - St. Peter's Hospital	40
Total	66

N = 1014

MT STCC 1st and 2nd Qtrs 2007



Livingston Memorial Hospital	11
Roundup Memorial Hospital-NEW	6
Harlowton - Wheatland Memorial Hospital	9
Plentywood - Sheridan Memorial Hospital- <u>NEW</u>	2
Sidney Health Center	4
Wolf Point - Northeast Montana Health Services	11
Poplar - Northeast Montana Health Services	8
Glasgow - Frances Mahon Deaconess Hospital	6
Big Timber - Sweet Grass Community Hospital	7
Bozeman Deaconess Hospital	38
Billings - Deaconess - Billings Clinic	169
Billings - Saint Vincent Hospital & Health Center	203
Colstrip Medical Clinic	10

N = 1014

Total

MT STCC 1st and 2nd Qtrs 2007

484



Western Region #'s by Hospital

Plains - Clark Fork Valley Hospital -NEW	7
Polson - St. Joseph Hospital	7
Anaconda - Community Hospital of Anaconda	14
Hamilton - Marcus Daly Memorial Hospital	17
Dillon - Barrett Hospital	6
Superior - Mineral County Hospital	34
Ronan - St. Luke Community Hospital	12
Kalispell Regional Hospital	122
Missoula - Community Medical Center	12
Butte - St. James Community Hospital	50
Missoula - St. Patrick Hospital	183
Total	464

N = 1014



First & Second Quarter Data Missing

- Central: Benefis
- Western- Kalispell/partial CMC/partial

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Additional Registry Facilities

- Beartooth Hospital, Red Lodge
- Big Sandy Medical Center
- Daniels Memorial, Scobey
- Roosevelt Medical Center, Culbertson
- Broadwater Health Center, Townsend
- Granite County, Phillipsburg
- Big Horn Memorial, Hardin
- McCone County, Circle
- Missouri River, Fort Benton
- Central Montana Medical, Lewistown
- Ruby Valley, Sheridan

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Additional Registry Facilities

- Powell County, Deer Lodge
- Prairie Community, Terry
- Madison Valley, Ennis
- Fallon Medical Center, Baker
- Powder River, Broadus
- Dahl Memorial, Ekalaka
- Northern Rockies, Cutbank
- Rosebud Health Center, Forsyth
- Holy Rosary, Miles City
- Phillips County, Malta

1st-2nd Quarter Patient YTD Demographics N = 1014

82 % ages 10-64 $5\% < 10 13\% \ge 65$

83% White 11% Native 4% ND

68% Male 32% Female

1st-2nd Quarter Patient YTD Demographics N = 1014

91% Blunt 7% Penetrating

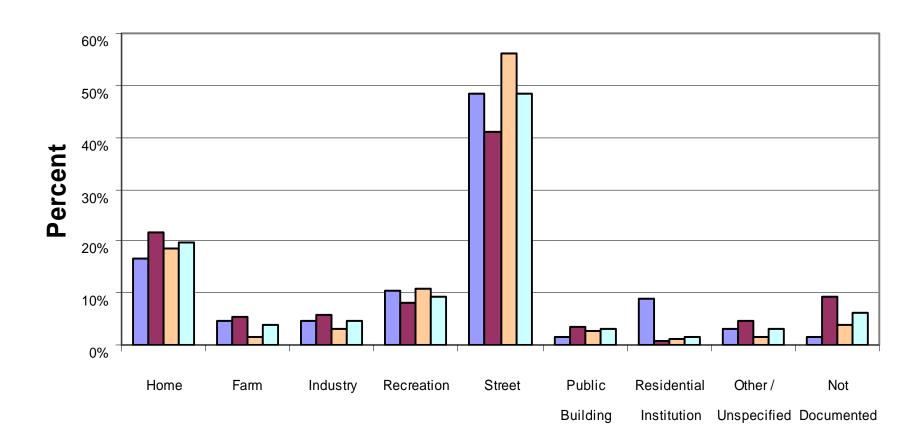
38% MVC 21% Falls

10% MC 6% Horse

48% Street/Highway

20% Home

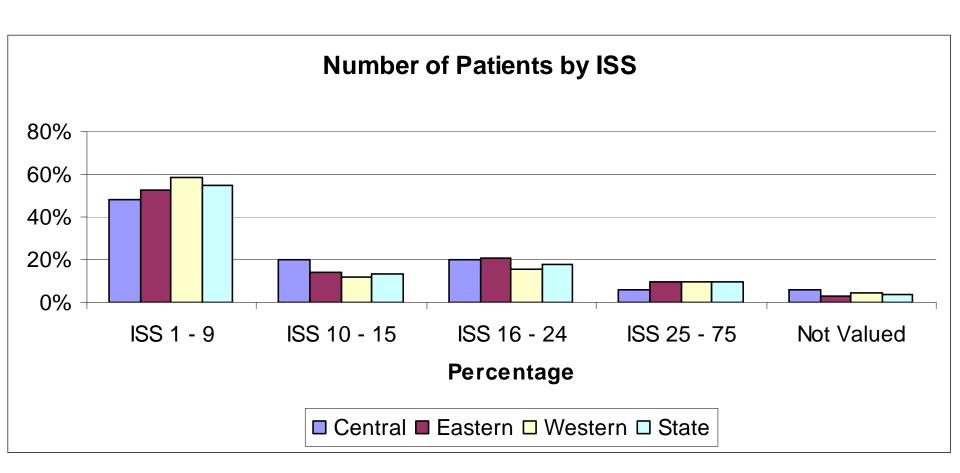
Location by Region Comparison



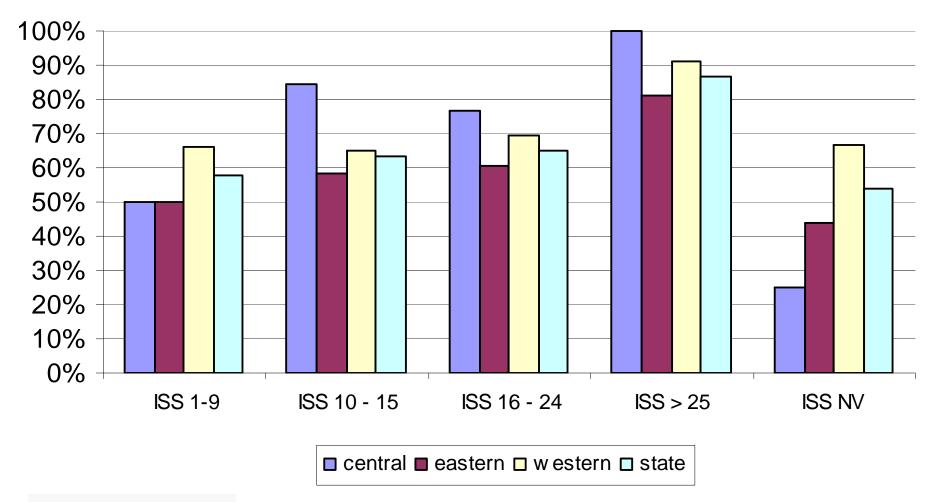
□ Central ■ Eastern □ Western □ State

N = 1014

MT STCC 1st and 2nd Qtrs 2007



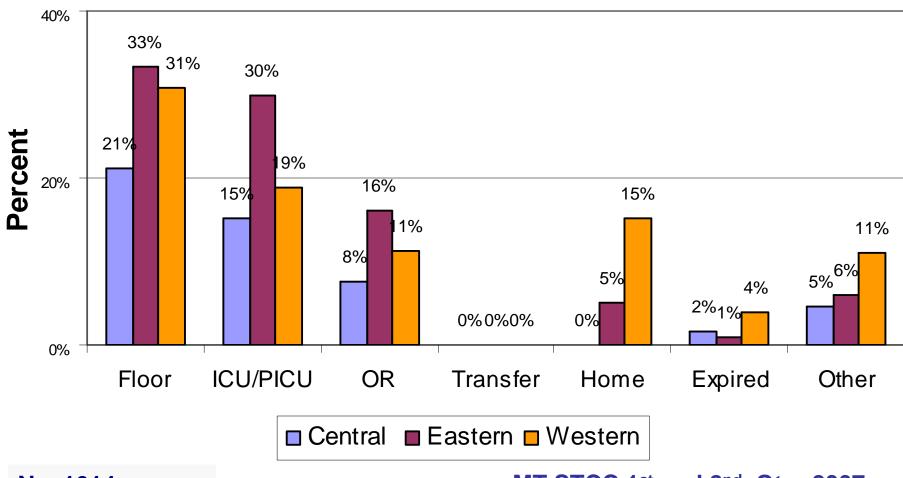
Trauma Team Activation (Full or Partial) by ISS



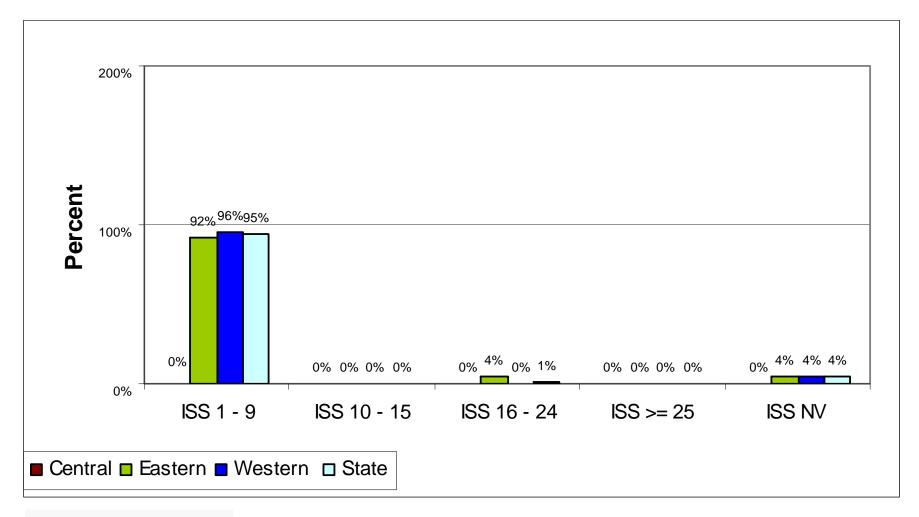
N = 1014

MT STCC 1st and 2nd Qtrs 2007

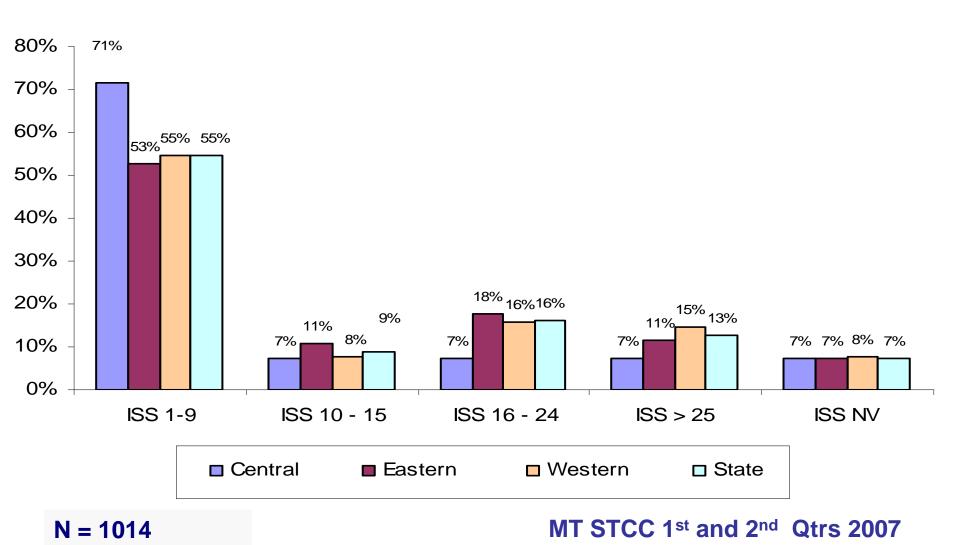




ED to Home by ISS

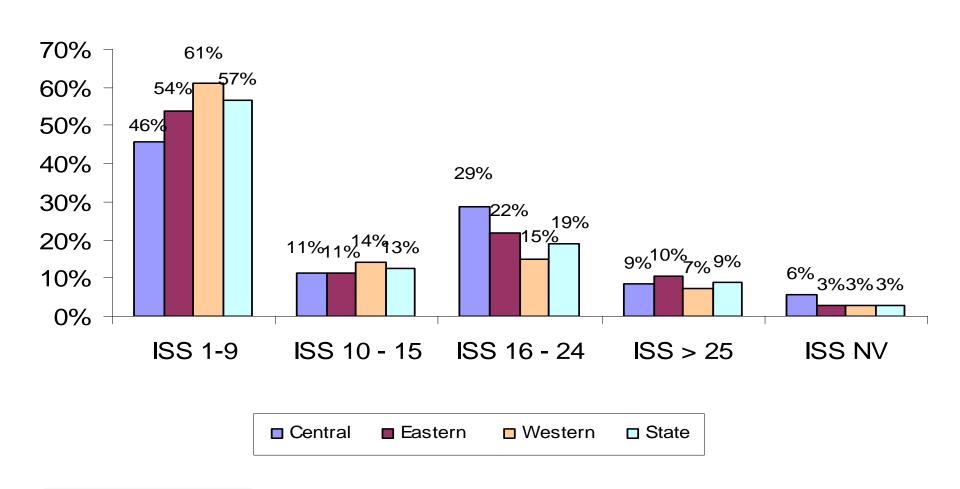


STATE **ED LOS: Less than 120 Minutes**

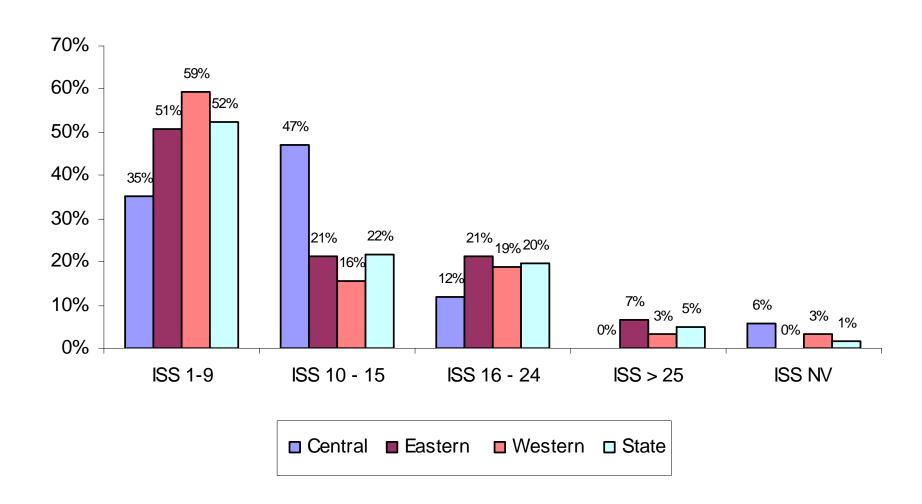


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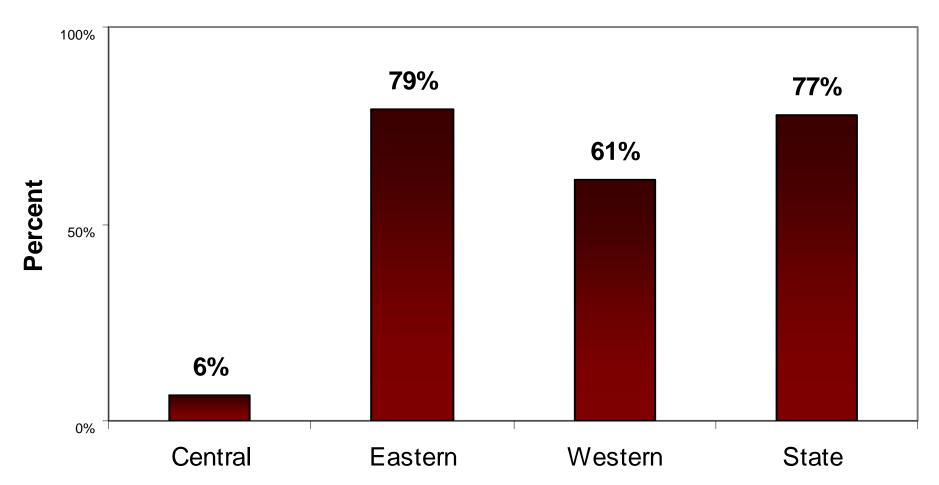
STATE ED LOS: 120 - 239 Minutes



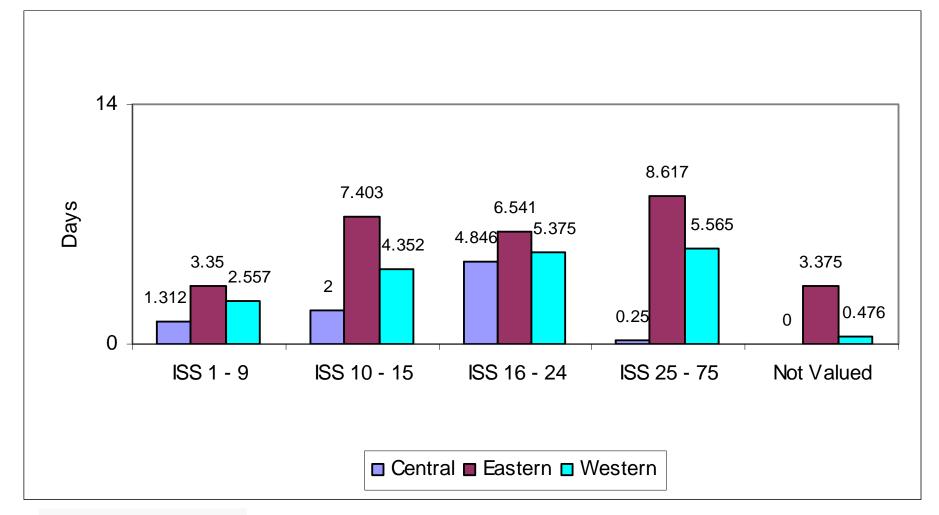
STATE **ED LOS: >239 Minutes**





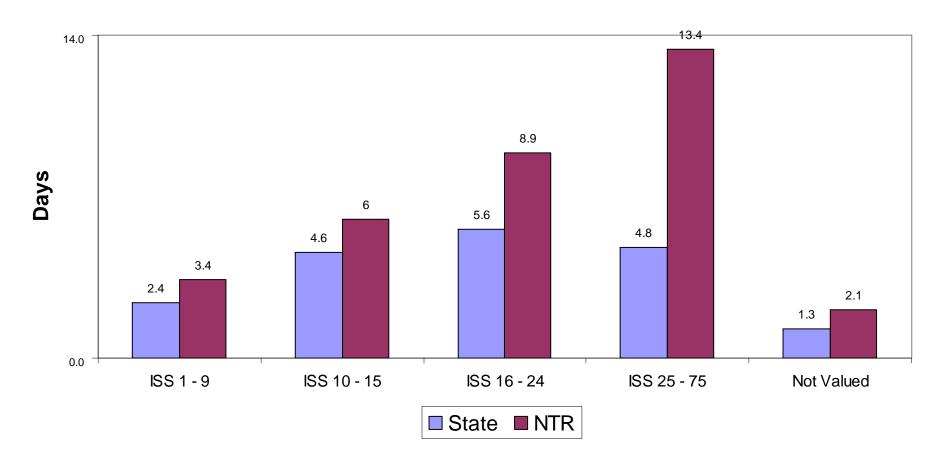




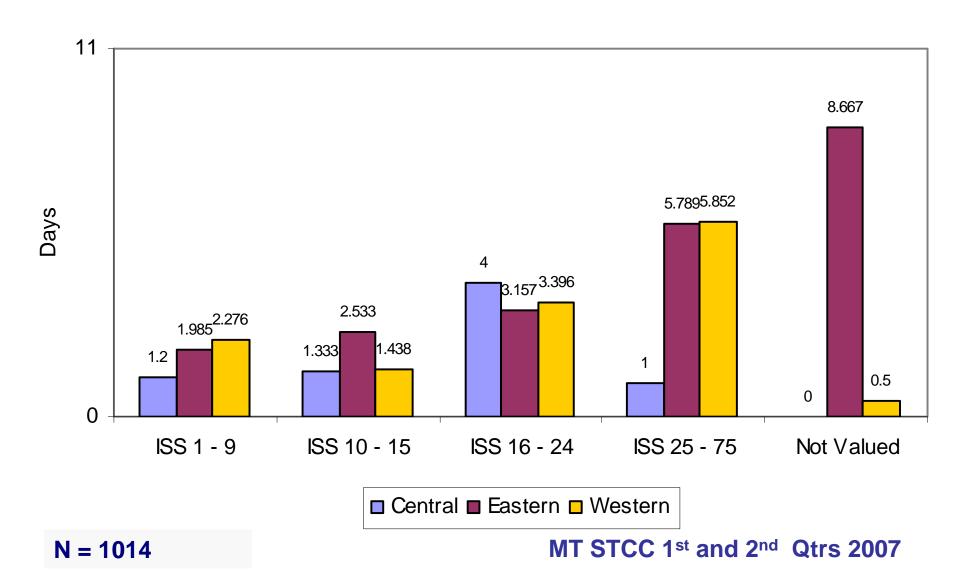


Avg. Hospital LOS

(comparing State and National Trauma Registry)

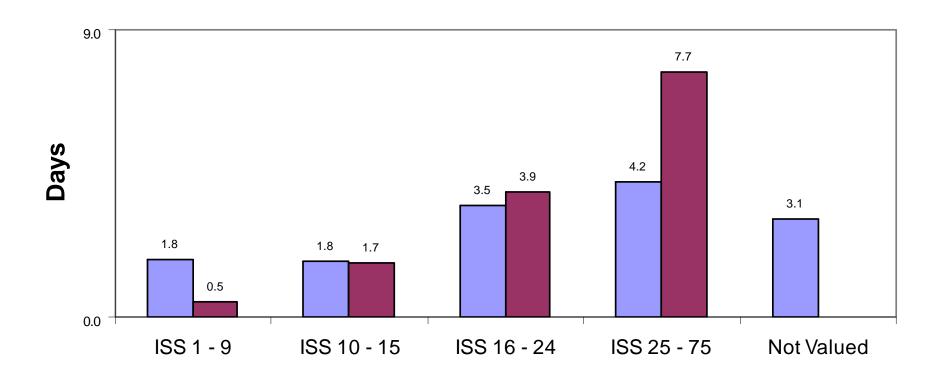






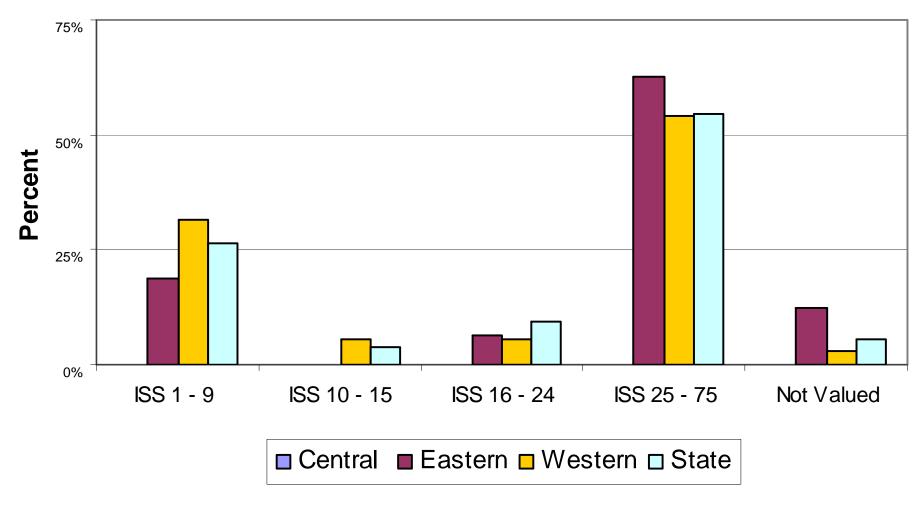
Avg. ICU LOS

(comparing State and National Trauma Registry)









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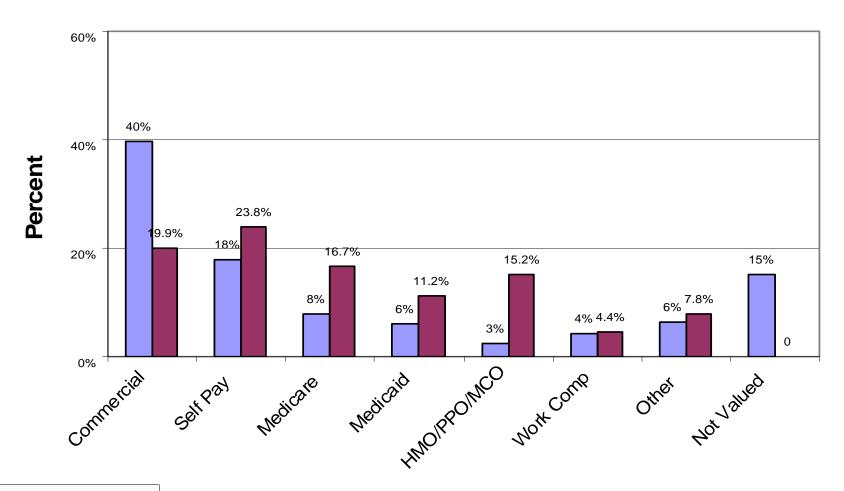
Fatalities (no DOS)

Injury Causes Of Fatalities
N = 53 YTD

```
MVC - 21 (40%) (Anoxia/Car into pond) - 2
Falls - 10 (19%)
MC - 7 (13%)
SI GSW - 5
Pedestrian - 3
Assault/Stabbing - 3
Bicycle vs vehicle - 3
SI Hanging - 1
```

Fatalities

Payors





Performance Indicators

1st Quarter 2007

January 1 – March 31, 2007

PI # 1: Trauma Patients Transported per EMS Without Trip Report in the Medical Record

Ambulance Transport: YTD 642 (63%)

Report available: YTD 452 (71%),

No Report: YTD 185 (29%),

ND: 9 (1%)

PI#1cont'd

Ambulance Transports YTD

Central: 46

+ Report: 44, No Report 2

Eastern: 279

+ Report: 206 (74%), No Report: 73 (35%),

Western: 351

+ Report: 241 (69%), No Report 110 (31%),



PI # 1

- No readily identifiable trends with services transporting significant numbers of patients
- MANY smaller services transporting few patients with & without reports add up!
- Strategy: focus regional/local efforts on addressing lack of trip reports with smaller services

PI # 2: Transferred Trauma Patients w/ISS > 15 & time at first facility > 6 hrs

- <u>7</u> YTD transfers w/ISS \geq 15 & time @ facility \geq 6 hrs
- Avg. hours = 13.76 hrs
- 4 transf. from ED; Avg time; 8.21hr
- 3 admitted prior to transfer;
 - Avg time; 26.11hr

PI #3: ED time \geq 2 hrs & ISS \geq 15

YTD 185 patients (18%)

□YTD Average ED time: 225 min (3.75hr)

□YTD Average ISS: 21



ED Disposition for patient w/ED time ≥ 2 hrs & ISS ≥ 15

YTD N = 185

ED Disposition Avg. ED time
ICU 48% 3.38hr

OR 9% 3.15hr

Floor 14% 4.41hr

Step down 2% 3.27hr

Peds 1% 3.25hr

Transferred to

Acute Care 36% 3.67hr

Died:- 4% (8); ICU/5, ED/2, OR/1

PI # 4:

Trauma patients who died with an

N= 16 YTD 2nd quarter= 8 ISS ≤ 15

MC (3); ISS 1, 4, "open wound" "open skull fx",died ED ISS 14: SAH, Fx skull w/coma NOS, fx maxilla, traumatic shock, died next day ICU

MVC(2); ISS 1, 1, both "Open wound scalp", died ED

SI GSW (1); ISS 1 "Open wound", died ED

Ped Vs MV (1); ISS 9; "pneumothorax"; died ED

Fall down stairs + ETOH (1); ISS 1: open wound scalp, facial contusions; died after 25 hosp days; + end stage ETOH/liver disease

100

PI # 4: Trauma Patients Who Died w/ISS ≤ 15

```
N= 16 YTD 2<sup>nd</sup> quarter: 8;
MC (3) ISS 1, 4, 14
MVC (2) ISS 1, 1
SI GSW (1) ISS 1
Ped v MV (1) ISS 9
Fall stairs/ETOH ISS 1
```

- Most under-coded due to limited visible injuries & died ED (6)
- Relatively simple injuries w/comorbidities & died inhospital (1)
- CHI w/coma NOS + shock + fx died next day in ICU (1)

PI # 5: Patients w/GCS ≤ 9 & not intubated YTD: 4

1st quarter: 2

Trauma code, Stab wound to chest, GCS 3, exanguinated, NO ET

Transfer; stab wound/abd, 2nd ED GCS 8, +BAC to OR 42", ET in OR

2nd quarter; 2 patients; Trauma code, MVC multiple pts BLS per EMS/family present- To ED, efforts DC'd on arrival, open skull fx, No ET 10

#2

EMS GCS 13, ED GCS 9, facial injuries +.074BAC, + cannabis, + benzos In ED 3hr 52"; to OR for facial repair "uncooperative", responsive, in restraints

Allowed to gradually awaken,
No ET prior to OR- dism to home after 6
hosp days, 2 in ICU